**What is claimed is:**

1. A system of automatic beam energy control, comprising:

a substrate holding apparatus, holding a substrate;

a measurement apparatus, measuring thickness and hydrogen content of the substrate; and

a comparing apparatus, providing a database further comprising critical hydrogen content limits and appropriate beam energy levels for substrates of different thicknesses, allowing determination of whether a measured hydrogen content value exceeds a critical hydrogen content limit, providing an appropriate beam energy level accordingly; and

a energy beam apparatus, delivering beam energy to the substrate accordingly.

2. The system as claimed in claim 1, wherein the measurement apparatus utilizes ellipsometry.

3. The system as claimed in claim 1, wherein the comparing apparatus issues a warning or alarm when hydrogen content exceeds a critical hydrogen content limit.

4. The system as claimed in claim 1, wherein the comparing apparatus instructs the measurement apparatus to measure thickness when the hydrogen content does not exceed the critical hydrogen content limit.

5. The system as claimed in claim 1, wherein hydrogen content is calculated in accordance with the

relationship between a light extinction coefficient and a bandgap of the substrate.

6. The system as claimed in claim 1, wherein thickness is calculated in accordance with a refractive index of the substrate.

7. The system as claimed in claim 1, wherein the substrate comprises amorphous silicon.

8. The system as claimed in claim 7, wherein the database comprises appropriate beam energy levels required by different thicknesses of amorphous silicon for reconstitution into crystal silicon.

9. A method of automatic beam energy control, comprising:

providing a substrate;

measuring hydrogen content of the substrate;

determining if hydrogen content exceeds a critical hydrogen content limit;

issuing a warning or alarm when hydrogen content exceeds a critical hydrogen content limit;

measuring substrate thickness when hydrogen content does not exceed a critical hydrogen content limit;

providing a database comprising a plurality of appropriate beam energy values corresponding to substrates of different thicknesses;

the database determining an appropriate beam energy level corresponding to the measured thickness; and

delivering beam energy to the substrate accordingly.

10. The method as claimed in claim 9, wherein thickness is calculated by measuring a refractive index of the substrate using a reflection meter.

11. The method as claimed in claim 10, wherein thickness is calculated by measuring a refractive index of the substrate using ellipsometry.

12. The method as claimed in claim 9, wherein hydrogen content is calculated in accordance with the relationship between a light extinction coefficient and a bandgap by measuring the light extinction coefficient of the substrate using ellipsometry.

13. The method as claimed in claim 9, wherein the substrate comprises amorphous silicon.

14. The method as claimed in claim 9, wherein the database is populated by determining appropriate beam energy levels required by different thicknesses of amorphous silicon for reconstitution into crystal silicon.

15. A method of automatic beam energy control, comprising:

providing a substrate on a substrate holding apparatus;

measurement of substrate hydrogen content by ellipsomety;

determining if hydrogen content exceeds a critical hydrogen content limit using a comparing apparatus;

the comparing apparatus issuing a warning or alarm when hydrogen content exceeds a critical hydrogen content limit;

measurement of substrate thickness by ellipsomety when hydrogen content does not exceed a critical hydrogen content limit;

providing a database comprising a plurality of energy values individually absorbed by substrates of different thickness;

determining a beam energy value corresponding to the measured thickness according to the database, using a comparing apparatus; and

a energy beam apparatus delivering energy to the substrate accordingly.

16. The method as claimed in claim 15, wherein thickness is calculated by measuring a refractive index of the substrate.

17. The method as claimed in claim 15, wherein hydrogen content is calculated in accordance with the relationship between a light extinction coefficient and a bandgap by measuring the light extinction coefficient of the substrate.

18. The method as claimed in claim 15, wherein the substrate comprises amorphous silicon.

19. The method as claimed in claim 15, wherein the database is populated by determining appropriate energy levels required by different thicknesses of amorphous silicon for reconstitution into crystal silicon.

20. The method as claimed in claim 15, wherein amorphous silicon is reconstitute into crystal silicon after receiving the beam energy.